OBJECTIVES

True vocal cord paralysis due to recurrent laryngeal nerve injury during bilateral orthotopic lung transplant/heart-lung transplant is a known complication. Patients with newly transplanted lungs are immunosuppressed and highly susceptible to aspiration induced pulmonary injury.

The purpose of this study is to describe a unique and important population of patients requiring vocal cord medialization and ascertain trends that may be helpful in their management.

METHODS AND MATERIALS

Between 2001 and 2006, all patients undergoing medialization thyroplasty or direct laryngoscopy with injection at a large academic lung transplant center were analyzed.

Patients who had undergone bilateral orthotopic lung transplant (BOLT) or heart-lung transplant (HLT) with resultant true vocal cord paralysis (TVC paralysis) and were medialized, were included in the analysis. Charts were retrospectively reviewed and data was collected. Age, reason for transplant, type of medialization procedure, pre and post op evaluation of swallow, improvement/correction of aspiration, timing of medialization, incidence of pneumonia, and other criteria were analyzed.

RESULTS

32 patients underwent medialization thyroplasty or direct laryngoscopy with injection for correction of unilateral true vocal cord paralysis due to BOLT (31) or HLT (1).

All 32 patients suffered left sided TVC paralysis. 62.5% received medialization thyroplasty as their primary treatment while 37.5% underwent direct laryngoscopy with injection at a large academic lung transplant center.

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Medialization thyroplasty and DL with injection are highly effective at completely correcting aspiration due to TVC paralysis as measured by objective preoperative and postoperative evaluations (84.2%).

BOLT/HLT patients may benefit from more expeditious medialization after transplant to prevent pulmonary insult.

Further studies are needed to establish whether the timing of medialization after transplant has an effect on the incidence of pneumonia and rejection in this population.

CONCLUSIONS

Patients with TVC paralysis requiring medialization after BOLT or HLT are at a high risk for aspiration (90.5%).

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REFERENCES


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